

PSYCHE.

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On the localities and habits of the various species of Omus.

The rarity of the species composing this genus, and the position which it holds in the ranks of Coleoptera, have always rendered it a favorite one with collectors, and the few notes which I have endeavored to bring together may not be without interest to the readers of Psyche. The species of Omus are more numerous than may be believed, as since the publication of Gemminger and Harold's Catalogue, vol. i, in which only four species are enumerated, the list has been increased to eight, and it is quite probable that more remain to reward the investigations of explorers. The following are the species at present known.

OMUS.

Eschscholtz. Zool. Atl., I, 1829, p. 4.

californicus Eschtz. Zool. Atl., I.

Audouinii Reiche. Ann. Fr., 1838.

Dejeanii Reiche. Ann. Fr., 1838. laevis Horn. Proc. Ac. Phil., 1866. submetallicus Horn. Trans. Am. Ent.

Soc., 1868.
Lecontei Horn. Trans. Am. Ent. Soc., Montrey (Gabb), Gaviota

sequoiarum Crotch. Edwardsii Crotch.

California, west of Sierra Nevada, and not farther south than Monterey Co. (Foothills and Sierra of California; Oregon; Washington

Territory; Vancouver Island.
Northern California; Oregon;
Montana; Vancouver Island.
Sierra Nevada; California.

El Dorado Co., California.

(W. S. Edwards), Cal. Big Trees, Calaveras Co., Cal. Lake Tahoe, California.

O. californicus. I have frequently found this species in various districts around San Francisco, and every year can look with certainty for a few specimens in particular localities. I have little doubt from its habits, that the whole of the group are

night feeders, as I have often seen californicus wandering from its haunts after sundown, as if in search of food. During the day they hide under small pieces of wood and branches of trees, rarely under large logs, and for three years in succession I obtained a large number of specimens of the present species by throwing some finely cut pieces of meat around the places in which I knew they were to be found. The lid of a box made an excellent trap, and one day I obtained, in a spot only about ten feet square, no less than twenty-six specimens. An English collector took over one hundred and fifty californicus at the Presidio, San Francisco, by digging in a sand bank, after having well baited the neighborhood, for several days, with finely chopped meat. I am not aware that this species has been found farther south than Gilroy, Santa Clara Co., or farther to the north of the State then Mendocino. It is certainly the most common of the group.

- O. Audouinii. I have seen no specimens of this insect taken farther south than the upper portion of the Sierra Nevada, in Plumas Co. It is far from rare in Oregon, and is occasionally found in some numbers along the rocky shores of the Columbia River, particularly about the Dallas. It is also frequent in Washington Territory and Vancouver Island, specimens having been found in the latter locality both by the late Mr. Crotch and myself.
- O. Dejeanii. Very common in some portions of Vancouver Island, especially about Sannich and Gold Stream. This is the largest and decidedly the handsomest species of the group.
- O. laevis. In a letter to me from Dr. Horn, dated July 1, 1870, the following passage occurs: "My 'lavis' was found in the foot hills east of Visalia, I think. It would do no harm to explore in the neighborhood of Half Moon Bay and Monterey, as I have an indistinct suspicion that insects from the two localities are mixed in my hands, accidentally." I regret that I am able to add no more information with reference to this unique species, which Dr. Horn informs me is remarkably distinct from any other form known to him.
- O. submetallicus. Soon after my arrival in California, I pointed out to my friend, Mr. James Behrens, of this city, a

specimen in his collection which I believed to be a new species of Omus. He soon afterward forwarded it to Mr. H. Ulke of Philadelphia, for identification, and it was shortly described by Dr. Horn under the above name, as from Mr. Ulke's cabinet. The specimen was taken in El Dorado Co., California, in June, 1865, by Mr. Elliot Crane, a relative of Mr. Behrens, and is the only one, I believe, at present known to entomologists. Dr. Horn speaks of it as "a very singular species, differing from all our others by its more elongate and cylindrical form as well as by its color."

- O. Lecontei. This very distinct species, easily known by its more slender form and very long antennæ, appears to have its locality in the more southern portions of California, the specimens from which Dr. Horn's description was made, having been taken by Mr. W. M. Gabb, near Monterey, and a pair in my own collection, a little farther south, viz., at Gaviota, by Mr. W. S. Edwards, of the U. S. Coast Survey.
- O. sequoiarum. The first specimen of this species which I ever saw was in the collection of Mr. J. Behrens, by whom it was taken at the only locality at present known for it, the Mammoth Tree Grove, Calaveras Co. During the visit of the late Mr. Crotch to this State, I called his attention to this insect, and he at once recognized it as a new species and visited the "Big Trees" almost for the purpose of finding so rare a treasure. He was rewarded by the capture of seventeen specimens, all remarkably constant in their characters. Last year (1874) I also took three specimens, two males, one female, in the same locality, two of which were running about a pathway in the dusk of the evening. The species is remarkable for its dull opaque black color and for the shorter, broader thorax, with its hind margins most distinctly rounded.
- O. Edwardsii. This species was first taken by myself at Lake Tahoe, California, beneath a pine log, the male and female being found in coitu. Mr. Crotch visited the locality and captured five specimens, all agreeing exactly with the original. It

¹ Mr. Ulke informs us that, owing to the number of his Californian correspondents and the quantity of specimens which he received from them, he was unable to recollect the particular source from which this specimen came. Ed.

is, with the exception of Dejeanii, the largest of the group, and is, in sculpture, intermediate between californicus and Audoninii. The head and thorax are much smoother than in the former species, while its very much larger size, and the extremely deep transverse fovea of the thorax, will serve to distinguish it from the latter.

I am not aware whether the two last named species were published by Mr. Crotch, but I know that careful descriptions of them were drawn up by him, and that he communicated them to friends in Europe and elsewhere under the names which I have here adopted.

Henry Edwards.

San Francisco, May 7, 1875.

On the Insect Fauna of the White Mountains.

New Hampshire holds within her limits as a State, a region which is proving itself more interesting to the entomologist than any other in the United States east of the Rocky Moun-The summit of Mount Washington, with an elevation of 6293 feet above the sea level, and with a climate giving an average temperature of 47.7° during its short summer, and that of Mount Adams, might well harbor species peculiar to a restricted locality and contrasting in character with the insect species afforded by the rest of New Hampshire and the New England States, which would throw important light on the questions of the effects of isolation and interbreeding on specific forms; and if the Glacial Epoch had aught to do with the distribution of the insects, we might expect these summits to harbor, as on aerial islands, species coming from a remoter north, valley inhabitants during the continuation of the cosmical winter, which ascended to the summits to find their congenial climate as the lengthening summers laid the mountains more and more bare of ice. Evidence of this seems to be afforded by the scientific labors of Mr. S. H. Scudder on the Grasshoppers and Butterflies. Say has described a species of the genus Oeneis from the summit of Mount Washington, whose congeners inhabit Labrador, Siberia, the Alps, the Ural and Rocky Mountains, and, from a study of specimens, it seems to be concluded